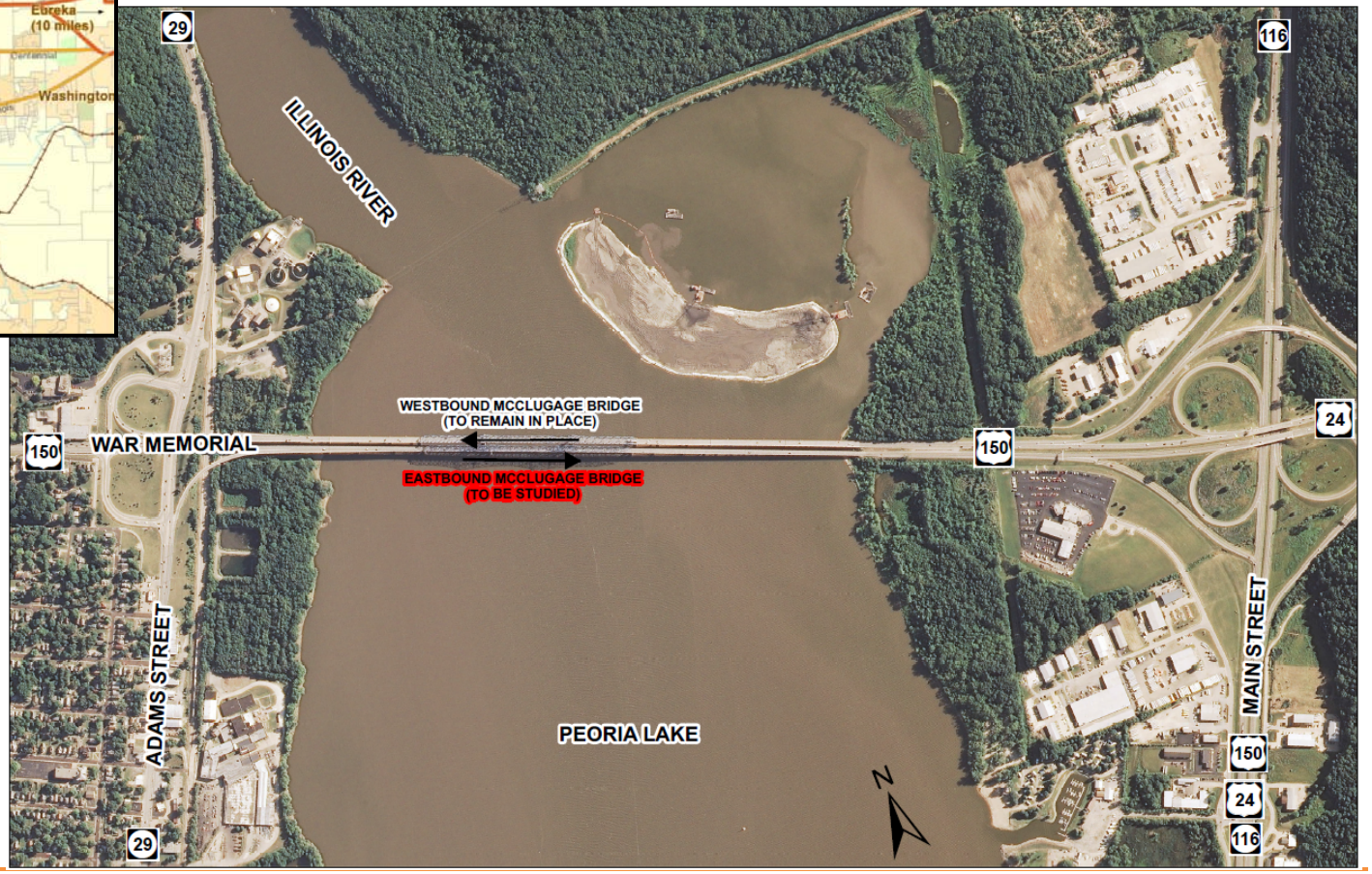
Welcome to the Public Informational Meeting for US 150 Eastbound (McClugage Bridge) over the Illinois River

Project Location Map



Today's Objectives

- Present the purpose and need of the project
- Provide information about the existing bridge
- Introduce alignment alternatives
- Introduce bridge type alternatives
- Introduce the study process and schedule
- Receive your input about the project

Preliminary Purpose and Need

Purpose

The purpose of the project is to accommodate eastbound US 150 traffic across the Illinois River on a transportation system that is structurally sound, meets current design standards, is designed for future traffic, and provides a safe crossing for the public.

Need

- The bridge is approaching the end of its serviceable life.
- The bridge is structurally deficient and functionally obsolete.
- Traffic is expected to grow and is anticipated to need more than two lanes.

Other Considerations

- Improve traffic flow at the west and east interchanges.
- Improve navigational clearance under the bridge.
- Provide bicycle and pedestrian access across the river.

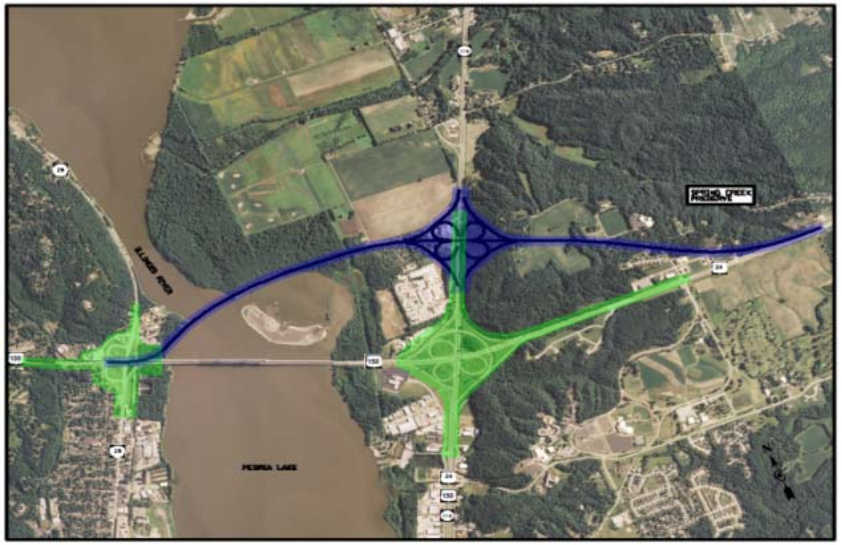
Existing Bridge Characteristics

- Originally constructed in the 1940s (1948 completion)
- Repair projects in 1964, 1971, 1974, 1976, 1977, 1986, 1990 and 1999
- 4,745’ existing structure length
- Navigation width – 350’
- Navigation height – 66.4’
- Existing roadway
  - 2-12’ lanes with 3’ shoulders
- 20,000 eastbound vehicles daily
- Annual IDOT inspections on the bridge are currently being performed

Historic Bridge Determination

- Eastbound McClugage Bridge is eligible for listing on the National Register of Historic Places.
- The study will consider the following measures:
  - Do nothing (no build)
  - Build on new location and leave old bridge
  - Rehabilitation without affecting historic integrity
  - Replacement with the existing bridge being offered for relocation and preservation to a third party.

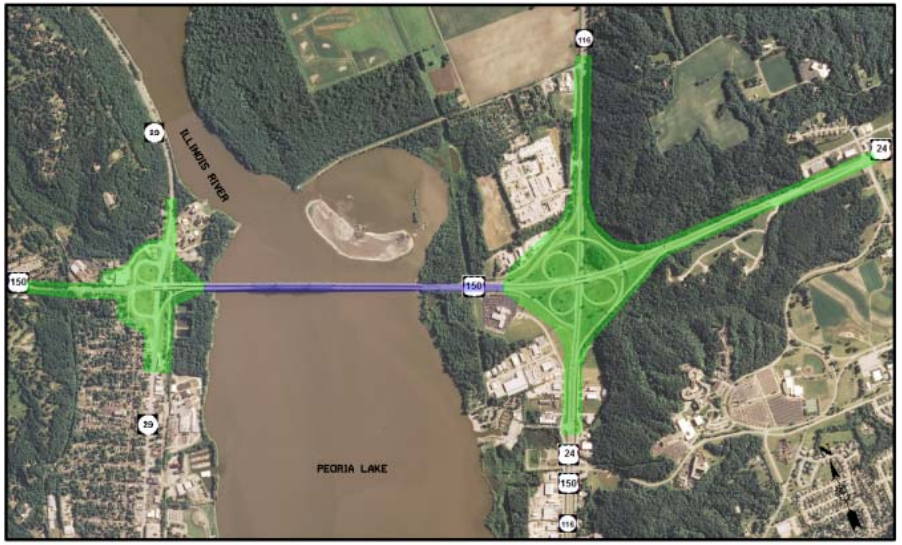
Preliminary Alignment Alternatives Not Carried Forward



Upper Free Bridge Alignment

Reasons for Elimination

- Interchange replacement required
- Duplication at existing westbound bridge
- New roadway alignment through natural areas
- Utility impacts
- Lorentz Avenue Park impacts
- Cost

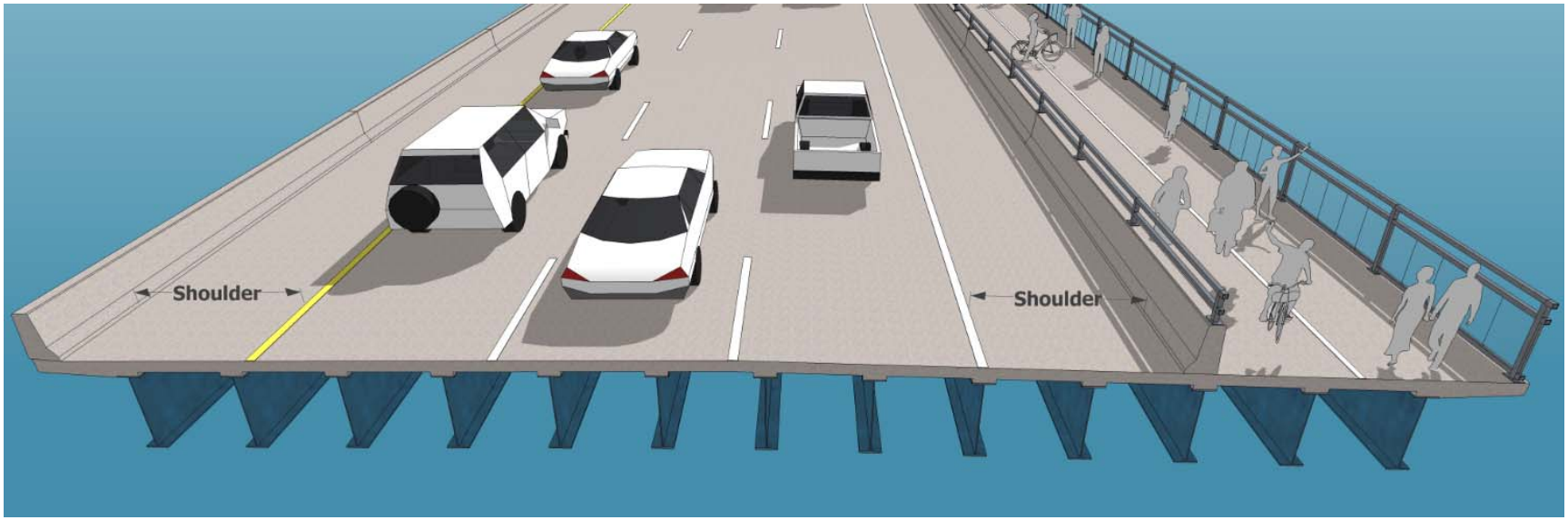


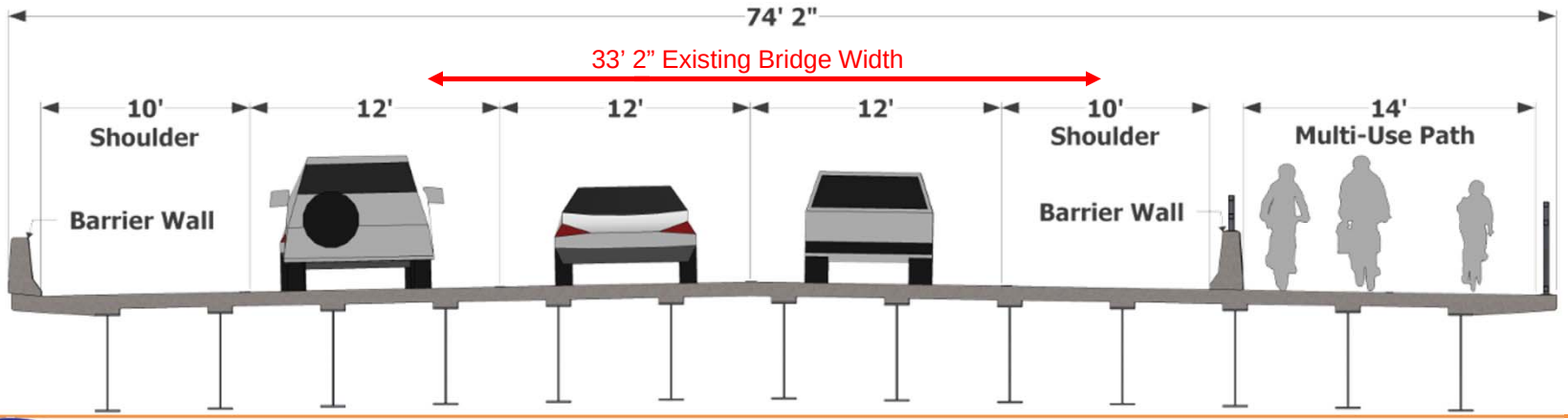
Existing Alignment (Eastbound bridge closed during entire construction)

Reasons for Elimination

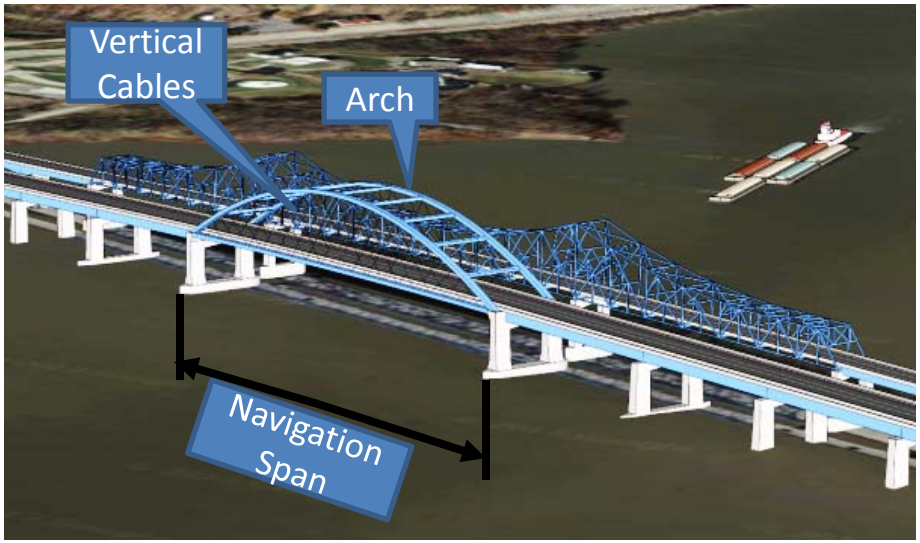
- Traffic delays during construction
- Long detour routes
- Commuter travel costs are high

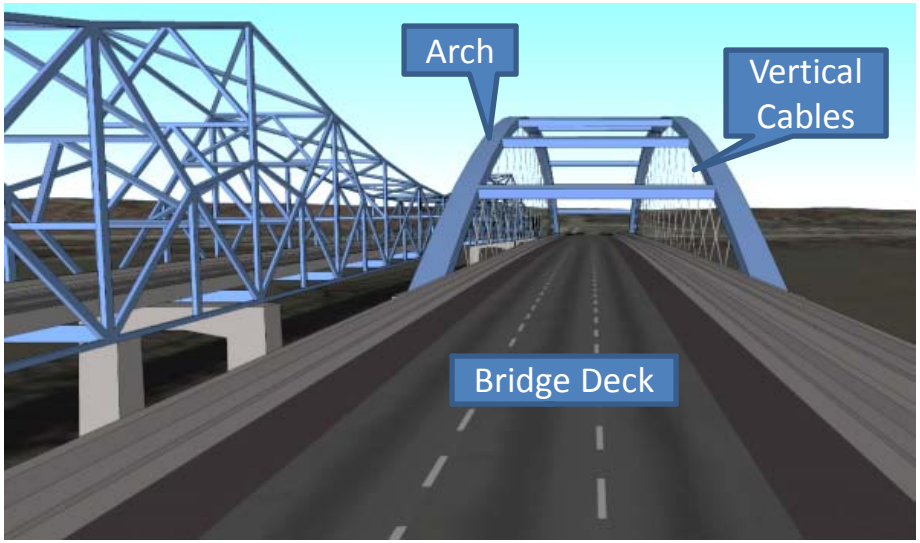
Proposed Bridge Section for New Bridge Option





Bridge Type Alternatives Recommended to Study





Deck Tied Arch

This bridge type spans the navigation opening using an arch that supports the roadway deck by using vertical cables. The entire arch is self-equilibrating, meaning the entire span may be lifted into place as a unit during construction. This bridge type is quite economical for the span length needed for this crossing.

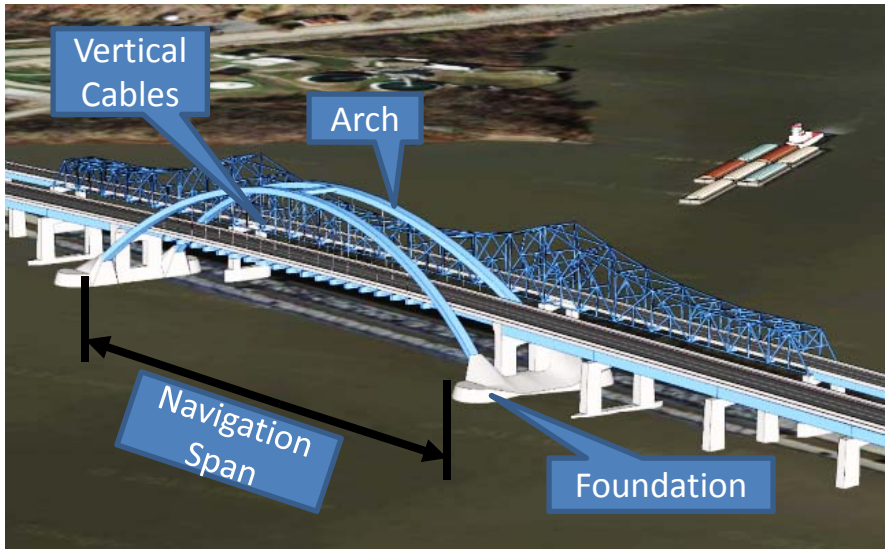
Advantages

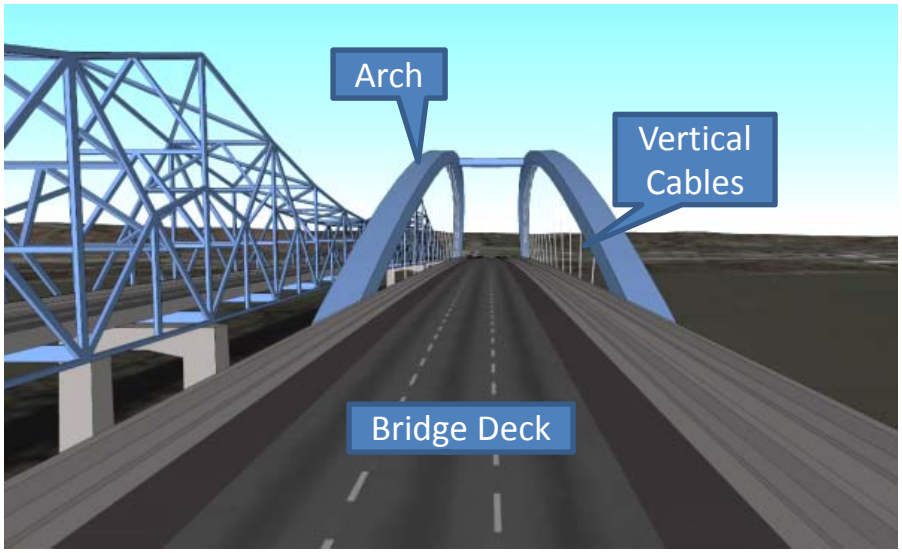
- Economical for this span length
- Minimal structure depth maintains roadway profile
- Can be built off-site and moved into place
- Construction with minimal navigation interference

Disadvantages

- Difficult to inspect underneath structure
- Deck replacement may be challenging if bridge deck is tied to structure

Bridge Type Alternatives Recommended to Study





True Arch

Similar to the Deck Tied Arch except the foundation supports the arch that supports the roadway deck. This design adds considerably to the size of the foundations. A temporary tie can be constructed for this bridge allowing it to be lifted into place during construction. The cost is somewhat greater than the Deck Tied Arch.

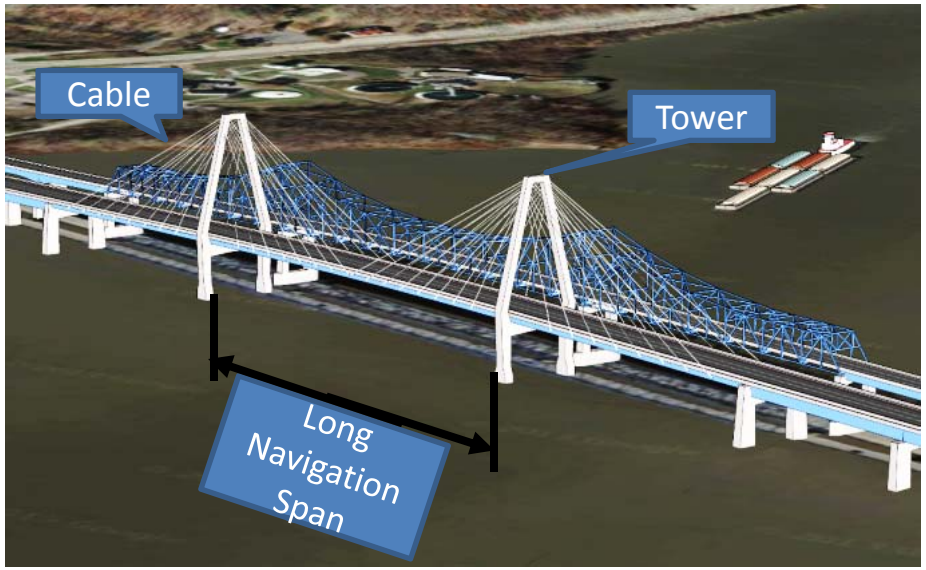
Advantages

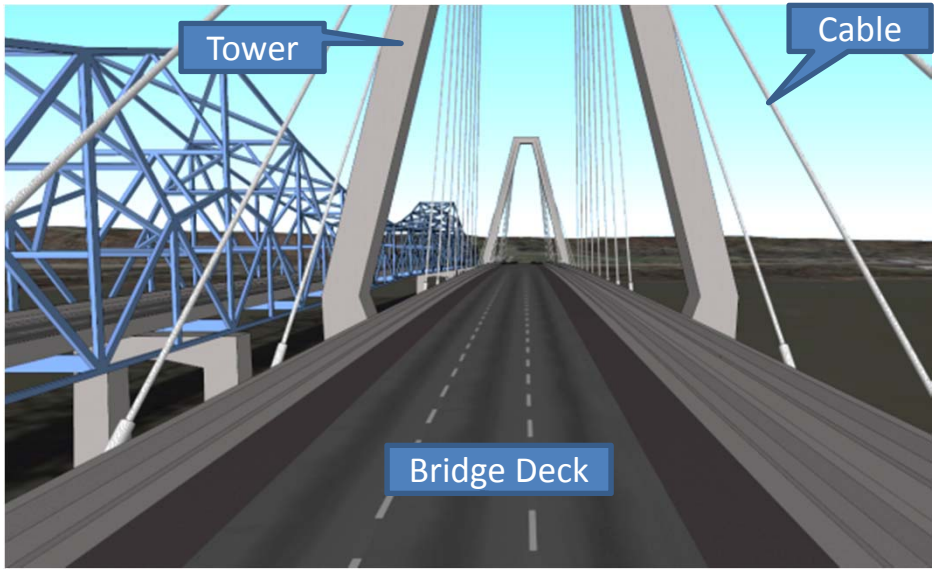
- Minimal structure depth maintains roadway profile
- Ease of deck replacement
- Can be built off-site and moved into place
- Construction with minimal navigation interference

Disadvantages

- Design of foundation support is more complex than other bridge types
- Arch construction and connection to the foundation is challenging

Bridge Type Alternatives Recommended to Study





Cable-Stayed

This bridge type is generally used for longer spans than can be achieved with either arches or girders. An example would be the Golden Gate Bridge in San Francisco, California. The roadway deck is supported by high strength cables that originate from towers. The cost is high compared to other bridge types.

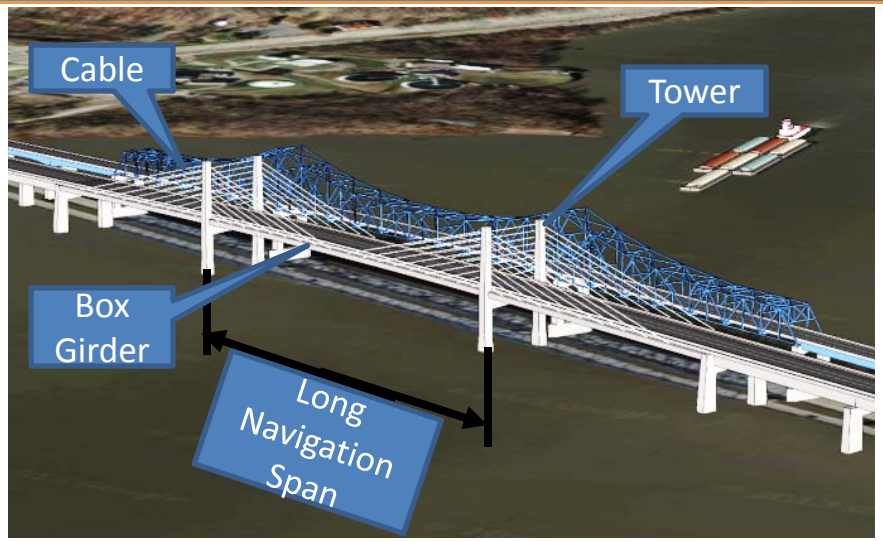
Advantages

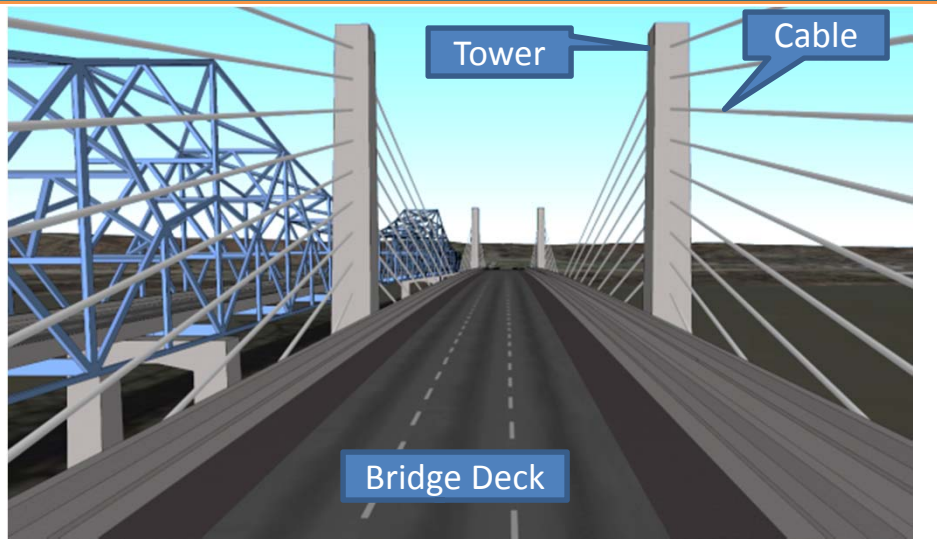
- Minimal structure depth maintains roadway profile
- Construction without navigation interference
- Ease of deck replacement

Disadvantages

- Highest cost
- Inspection more difficult than other bridge types
- Design of tower and cables is more difficult than other bridge types
- Most difficult bridge type to construct

Bridge Type Alternatives Recommended to Study





Extrados

This bridge type is a hybrid between a box girder bridge and a cable-stayed bridge. The towers are approximately half as tall as for a cable-stayed bridge. This form allows longer spans for more slender box girders, and can be more economical for spans in the range of the McClugage bridge than a pure box girder bridge. This option would potentially raise the roadway more than the arch options.

Advantages

- Construction without navigation interference
- Ease of deck replacement

Disadvantages

- Structure depth would raise roadway
- Design of tower and cables is more difficult than other bridge types
- Construction more difficult than other bridge types

Bridge Type Alternatives Recommended to Study

Through Truss

This is the type of bridge currently in service for both McClugage Bridge structures. This bridge form was quite common before the 1960s due to the efficient use of steel. Both single-span and three-span trusses are an option for this bridge type. Construction and maintenance of this bridge type involves more cost than for competing bridge forms, so the through truss is rarely seen in new projects.

Advantages

- Matches existing bridge
- Minimal structure depth maintains roadway profile
- Construction with minimal navigation interference

Disadvantages

- High cost
- Most complex bridge type to design
- Most difficult bridge type to inspect
- Deck replacement difficult

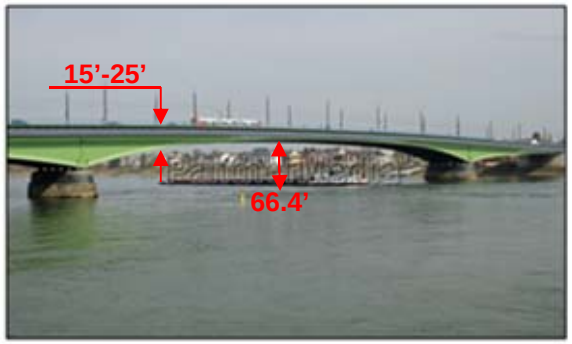
Preliminary Bridge Type Alternatives Not Carried Forward

Dual Deck

Concrete Segmental Box Girder

Steel Box Girder

Deck Truss



Haunched Plate Girder

These bridge types were eliminated due to structure depth, impacts to the interchanges and cost. The depth to support the bridge deck requires the roadway elevation to increase to maintain the river channel navigation clear height of 66.4’.

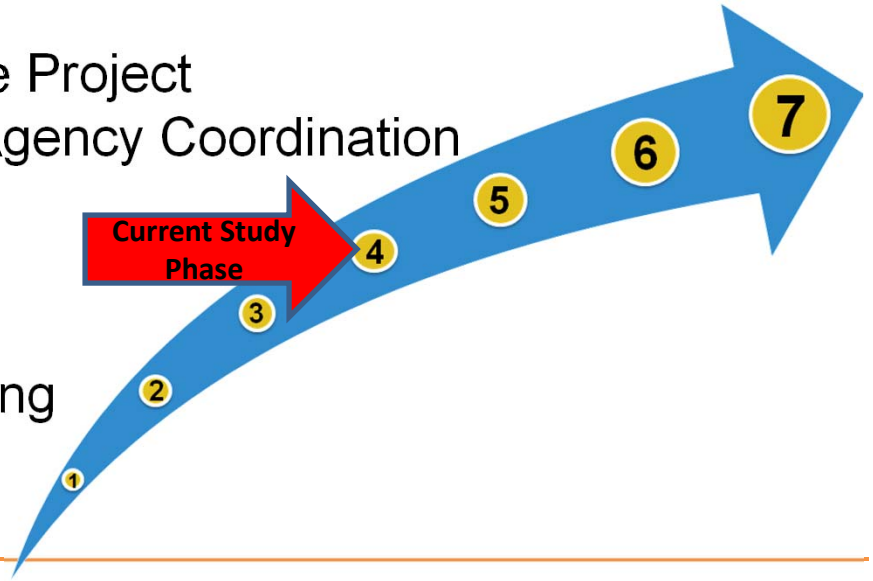
Environmental Process

Environmental Assessment (EA) – A concise public document that provides sufficient evidence and analysis for determining whether to prepare a FONSI for a project.

Finding of No Significant Impact (FONSI) – A document by a Federal Regulatory agency that briefly presents the reasons why an action will not have a significant impact on the environment.

EA Study Process

1. Initiate the EA and Define Scope of the Project
2. Initiate Public Involvement and Early Agency Coordination
3. Establish Purpose and Need
4. Evaluate Alternatives
5. Develop Preliminary EA
6. Approve EA and Conduct Public Hearing
7. Issue FONSI



Proposed Project Schedule

Project Phase	Phase Description	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	See Below
1	Purpose and Need for the Project	✓	✓				
	Roadway Alternatives to be Carried Forward	✓	✓				
	Preferred Roadway Alternative		✓	✓			
	Bridge Type Preferred Alternative		✓	✓			
	Environmental Assessment Approval				✓		
	Public Hearing				✓	✓	
	Report Approval						
2	Prepare Construction Plans						2016-2017
3	Construction						2018-2021

Public Involvement

Here's how you can be involved:

- Sign-in to the project website at www.mcclugagebridgeproject.com to get project updates
- Review the exhibits and ask questions of project staff
- Give us your input about the project